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What is claimed is:

1. A compound having the structure

$$Q \xrightarrow{\stackrel{\bullet}{I}} D \xrightarrow{X^1} X^2 - R^2$$

5 including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof, wherein

A, B and D are independently selected from CH or N;

10 X^1 is $(c)_n$ (where n is 1, 2 or 3),

O, NR⁵, S, SO, SO₂, $-o-\frac{R^3}{c}$, $-N-\frac{R^3}{c}$, $-s-\frac{R^3}{c}$,

above groups is linked to the aromatic ring; (where R^3 and R^4 are independently H, alkyl, arylalkyl or cycloalkyl, or R^3 and R^4 can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R^5 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R is H, alkyl, alkenyl, aryl, arylalkyl, heterocycloalkyl, cycloalkyl, or cycloalkylalkyl; R¹ is alkyl, arylalkyl, aryl, alkenyl,

heterocyclo, heterocycloalkyl, — N-heterocycle (where R^{5a} can R^{5a}

be any of the R^5 groups), cycloalkyl, cycloalkylalkyl or R^6 $-N-R^7$ (where R^6 and R^7 are independently selected from H, aryl, alkyl, arylalkyl or cycloalkyl, or R^6 and R^7 can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R^1 can

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be taken together with the -N-S- atoms to form a 5- to 8membered ring;

 X^2 is a single bond, -N- or -O- (where R^8 is H,

5 alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R² is H, alkyl, arylalky

 ${\bf R}^{10}$ and ${\bf R}^{11}$ are independently selected from H, alkyl, arylalkyl or cycloalkyl, or \mathbf{R}^{10} and \mathbf{R}^{11} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring); and

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the R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where \mathbf{R}^{15} and \mathbf{R}^{16} are independently selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or \mathbb{R}^{15} and \mathbb{R}^{16} can be taken together with the nitrogen to which they are attached to form a 5to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring; and

 R^{13} is (wherein this moiety is as 25 defined with respect to R12);

with the proviso that where X^1 is -0 and A, B and C are all carbon, then

- at least one of R^{15} and R^{16} is aryl, arylalkyl, heterocyclo or heterocycloalkyl, or alkyl of 4 to 12 carbons; and/or
- (2) Q is other than $R^{12}-C-$ (where R^{12} is methyl, ethyl, CF3 or alkoxy); and/or

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- (3) where Q is R^{12} —C— and R^{12} is R^{14} , then heterocycle is a monocyclic or bicyclic heterocycle ring containing from 5 to 10 ring members, containing one to five nitrogen atoms, and/or one or two oxygen atoms, and/or one sulfur atom; and/or
- (4) where Q is R^{12} —C— and R^{12} is R^{16} , then at least one of R^{15} and R^{16} contains an additional amino group or R^{15} and R^{16} taken together with the nitrogen atom to which they are attached form a ring which contains an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring; and/or
- 2. The compound as defined in Claim 1 having the structure

$$Q \xrightarrow{A} X^{1} X^{2} - R^{2}$$

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3. The compound as defined in Claim 1 having the structure

$$\begin{array}{c}
R \\
SO_2
\end{array}$$

$$X^2 - R^2$$

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4. The compound as defined in Claim 3 having the structure

$$Q \xrightarrow{R} X^2 - R^2$$

5. The compound as defined in Claim 1 having the structure

6. The compound as defined in Claim 1 having the structure

$$Q = \begin{bmatrix} R & R & R^1 \\ R & SO_2 & R^2 \\ R & R^2 & R^2 \end{bmatrix}$$

7. The compound as defined in Claim 1 having the formula

$$Q = \begin{pmatrix} R & R^1 \\ R & SO_2 \end{pmatrix}$$

$$R & SO_2 & R^2$$

$$R & R^3 & R^3$$

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8. The compound as defined in Claim 1 having the structure

9. The compound as defined in Claim 1 having the 15 structure

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Q A
$$X^2-H$$
 (or alky1)

10. The compound as defined in Claim l wherein R is H;

R1 is aryl or alkyl;

 X^2 is 0 or a single bond;

 R^2 is H;

Q is
$$-C-N-R^{15}$$
 or $-SO_2-N-R^{15}$

where \mathbf{R}^{15} and \mathbf{R}^{16} are independently H, aryl, aralkyl or aminoalkyl;

 X^{1} is $-0 - \stackrel{R^{3}}{\overset{}{\overset{}_{C}}{\overset{}{\overset{}}{\overset{}}{\overset{}}}}$, $- \stackrel{R^{3}}{\overset{}{\overset{}{\overset{}}{\overset{}}{\overset{}}{\overset{}}}}$ or $- \stackrel{R^{3}}{\overset{}{\overset{}{\overset{}}{\overset{}}{\overset{}}}}$;

A and B are each CH, and

D is N or CH.

11. The compound as defined in Claim 1 having the structure

12. The compound as defined in Claim 1 having the structure

,,/OH

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- 155 -

- 156 -

- 158 -

HN S O 'vOH ,S.o

13. The compound as defined in Claim 1 having the structure

- 14. A pharmaceutical composition comprising a 5 compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.
- 15. A method for preventing or treating cardiac arrhythmia, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compound which has the structure

$$Q \xrightarrow{\stackrel{\bullet}{\downarrow}} D \xrightarrow{X^1} X^2 - R^2$$

including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof, wherein

A, B and D are independently selected from CH or N;

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$$X^1$$
 is $(\overset{R^3}{C})_n$ (where n is 1, 2 or 3), $\overset{R^3}{R^4}$ 0, $\overset{R^3}{R^5}$ 0, $\overset{R^3}{R^4}$ 0, $\overset{R^3}{R^5}$ 0, $\overset{R^3}{R^5}$ 0, $\overset{R^3}{R^5}$ 0, wherein the heteroatom in each of the

above groups is linked to the aromatic ring;

(where R^3 and R^4 are independently H, alkyl, arylalkyl or 5 cycloalkyl, or R3 and R4 can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R⁵ is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R is H, alkyl, alkenyl, aryl, arylalkyl, heterocycloalkyl, cycloalkyl, or cycloalkylalkyl;

R1 is alkyl, arylalkyl, aryl, alkenyl,

heterocyclo, heterocycloalkyl, -N-heterocycle (where R^{5a}

can be any of the R^5 groups), cycloalkyl, cycloalkylalkyl 15 or $-\mathbf{N}-\mathbf{R}^7$ (where \mathbf{R}^6 and \mathbf{R}^7 are independently selected from H, aryl, alkyl, arylalkyl or cycloalkyl, or R⁶ and R⁷ can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R^1 can 20 be taken together with the -N-S- atoms to form a 5- to 8membered ring;

 X^2 is a bond, $-\frac{N}{2}$ or -O- (where R^8 is H, alkyl,

alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R¹⁰ and R¹¹ are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R^{10} and R^{11} can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring); and

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Q is $R^{12}-C-N-$, $R^{12}-C$, $R^{13}-S-$ or $R^{12}-heterocycle$ NC-N 0 (where R^{12} is alkyl, arylalkyl, aryl, $-N-R^{15}$, heterocycle, R^{16}

heterocycloalkyl, -N-heterocycle where R^{14} can be any of the $\frac{1}{R}$ 14

 R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where R^{15} and R^{16} are independently selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or R^{15} and R^{16} can be taken together with the nitrogen to which they are attached to form a 5-to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring); and

 R^{13} is R^{16} (wherein this moiety is as defined with respect to R^{12}).

16. A method for preventing or treating atrial arrhythmia, which comprises administering to a mammalian species in need of treatment a therapeutically effective amount of a compound which has the structure

$$Q \xrightarrow{\stackrel{A}{\downarrow}} D \xrightarrow{X^2 - R^2}$$

20 including pharmaceutically acceptable salts thereof, prodrug esters thereof, and all stereoisomers thereof, wherein

A, B and D are independently selected from CH or N;

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$$X^1$$
 is $(c)_n$ (where n is 1, 2 or 3),

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O, NR⁵, S, SO, SO₂,
$$-0$$
 $-\frac{R^3}{C}$, $-\frac{R^3}{N^5}$, $-\frac{R^3}{C}$, $-\frac{R^3}{N^5}$, wherein the heteroatom in each of the

above groups is linked to the aromatic ring; (where R^3 and R^4 are independently H, alkyl, arylalkyl or cycloalkyl, or R^3 and R^4 can be taken together with the carbon to which they are attached to form a 5 to 8 carbon containing ring; and R^5 is H, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);

R is H, alkyl, alkenyl, aryl, arylalkyl,

10 heterocycloalkyl, cycloalkyl, or cycloalkylalkyl;

R1 is alkyl, arylalkyl, aryl, alkenyl,

heterocycle, heterocycloalkyl, -N-heterocycle (where R^{5a}

can be any of the R^5 groups), cycloalkyl, cycloalkylalkyl R^6 or $-N^{-R^7}$ (where R^6 and R^7 are independently selected from H, alkyl, arylalkyl or cycloalkyl, or R^6 and R^7 can be taken together with the nitrogen atom to which they are attached to form a 5 to 8 membered ring); or R and R^1 can be taken together with the -N-S- atoms to form a 5- to 8-membered ring;

 X^2 is a bond, -N- or -O- (where R^8 is H, alkyl,

alkenyl, aryl, arylalkyl, cycloalkyl or cycloalkylalkyl);
 R² is H, alkyl, arylalkyl,

 ${\bf R}^{10}$ and ${\bf R}^{11}$ are independently selected from H, alkyl, arylalkyl or cycloalkyl, or ${\bf R}^{10}$ and ${\bf R}^{11}$ can be taken together with the nitrogen to which they are attached to form a 5- to 8-membered ring); and

Q is
$$R^{12}$$
— C — N —, R^{12} — C , R^{13} — S — or R^{12} —heterocycle NC— N

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(where ${\bf R}^{12}$ is alkyl, arylalkyl, aryl, $-{\bf N}-{\bf R}^{15}$, heterocycle, ${\bf k}^{16}$ heterocycloalkyl, $-{\bf N}-{\bf heterocycle}$ where ${\bf R}^{14}$ can be any of the ${\bf k}^{14}$

 R^8 groups), alkoxy, aryloxy, arylalkoxy, cycloalkyl or cycloalkylalkyl, and where R^{15} and R^{16} are independently selected from H, alkyl, arylalkyl, heterocyclo, cycloalkyl or heterocycloalkyl, or R^{15} and R^{16} can be taken together with the nitrogen to which they are attached to form a 5-to 8-membered ring which may optionally contain an additional nitrogen atom in the ring and/or an amino group or an aminoalkyl group attached to the ring); and

 R^{13} is \mathbf{k}^{16} (wherein this moiety is as defined with respect to R^{12}).

17. The compound as defined in Claim 1 having the structure

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